APPENDIX A RESOURCE CONSIDERATIONS

The following resource objectives and guidance for wildland fire suppression, rehabilitation, prescribed burning, and other fuels management will be carefully considered under Alternative B for all Field Offices prior to fire management activities. These guidelines for fire related activities are intended to help protect the resources and values from wildland fire and, where feasible, to use fire-related activities to help meet the stated resource objectives. These guidelines are supplemented by Field Office specific guidance identified in later appendices.

Air Quality Objective: To protect air quality.

Wildland Fire Suppression and Rehabilitation:

The State Department of Environmental Quality will be notified of potential smoke effects resulting from a wildland fire being managed to achieve resource values. This will allow notification of potentially affected smokesensitive organizations, such as hospitals, schools, and retirement centers.

Prescribed Burning and Other Fuels Management:

Class I airsheds: Prescribed burning should not occur in a location or under conditions that would degrade Air Quality Related Values (AQRVs) in the following Air Quality Class I areas in and around Montana and the Dakotas: Glacier NP, Cabinet Mountain, Flathead, Mission Mountains, Selway-Bitterroot, Anaconda-Pintlar, Gates of the Mountain, Scapegoat, Bob Marshall, Medicine Lake, Fort Peck, U.L. Bend, Ft. Belknap Indian Reservation, Northern Cheyenne, Yellowstone NP, North Absaroka, Washakie, Red Rock Lakes, Lostwood, North Unit, Elkhorn Ranch Site, South Unit, Wind Cave, Badlands NM, or any other Air Quality Class I area. These AQRVs include visibility, odors, and impacts to flora, fauna, soils, water, and geologic and cultural structures.

Monitoring: Weather and smoke dispersion conditions should be monitored to assure air quality impacts remain within prescribed smoke management levels. If monitoring indicates conditions are no longer within prescription, the fire will be declared a wildfire and appropriate response strategy should be initiated.

Nonattainment areas: Prescribed burning should not occur in a location or under conditions that would degrade air quality in the following designated nonattainment areas in Montana or the Dakotas: Great Falls, Columbia Falls, Flathead County (Whitefish and vicinity), Kalispell, Polson, Ronan, East Helena, Libby, Missoula, Lame Deer, Sanders County (Thompson Falls and vicinity), Butte, Great Falls, Billings, or the Laurel area.

Notification: Smoke sensitive entities (e.g. hospitals, schools, retirement centers, agencies, etc.) should be notified prior to and during prescribed fire activities. The public should be informed of the status of prescribed and managed fires, including smoke management contingencies, through the local press, radio, and television. Interagency Dispatch Office should be provided daily information on burning projects throughout the region.

Overnight burns: Prescribed burns should not continue overnight near Class I areas, near nonattainment areas, or near population centers to avoid greater impacts from smoke that result from air inversions.

Burn permits and other regulations: Prescribed fires require the approval from the Montana Department of Health and Environmental Science, Air Quality Bureau prior to initiating a burn. Prescribed fire will conform with the provisions of state regulations and implementation plans as specified in 9210-Fire Planning section of the BLM manual.

Cultural Resources Objective: To protect high value cultural resources from fire management related activities that could damage or destroy these cultural resources.

Wildland Fire Suppression and Rehabilitation:

Equipment Restrictions: Protect cultural and paleontological resources and values by restricting fire suppression to "light-on-the-land" fire suppression tactics in designated ACECs, archeological districts, and other designated high value cultural sites. Limit the use of heavy equipment and off road vehicles to existing roads and trails within these same areas during rehabilitation. Use of earth moving/ tillage equipment would be prohibited for wildland fire suppression in areas with special designations to protect cultural resources and values, archeological districts, and other designated high value cultural areas and values unless waived by the Field Office Manager or an authorized officer. The aerial application of fire retardant would be restricted over areas that contain petroglyphs and pictographs. Priority for placement of fire camps and fire staging areas should be outside these special cultural areas. Use of motorized vehicles in these areas during mop-up should be minimized.

An intensive cultural resource inventory (Class III) should be completed where the surface has been disturbed by suppression activities (e.g., fire lines, fire camp areas, staging areas). Class III inventory will be completed in these areas before rehabilitation. Cultural resources discovered in or near disturbed areas will be protected from further damage during rehabilitation. A BLM resource advisor will be on site during suppression and rehabilitation activities to give guidance and ensure compliance with the guidelines and decisions established to protect cultural resource values.

Prescribed Burning and Other Fuels Management:

Cultural Inventories: To avoid damage to cultural resources and values, procedures adopted in IM No. 99-032 should be followed to meet requirements under the National Historic Preservation Act. Among other things this instruction memo specifies a class III inventory shall be conducted on all areas subject to surface disturbing activities.

ACEC areas: No prescribed burning should occur in or adjacent to designated historical or traditional religious ACECs without prior consultation with affected Native Americans or without appropriate inventory and safeguards consistent with IM-99-032.

Native American Consultation: Prior to implementing fire plans, the BLM will do an appropriate level of Native American consultation according to the guidance in BLM Manual 8160 and Handbook H-8160-1 to identify potential religious or cultural concerns.

OHV management guidance and restrictions listed under wildland fire suppression above will also apply to prescribed burning to protect cultural values. Priority for placement of fire camps and staging areas should be outside these special cultural areas. Use of motorized vehicles in these areas during mop-up should be minimized.

Fire management Objective: Use fire management treatments and activities where appropriate to help achieve other resource management objectives. Develop and implement an updated fire management plan for each Field Office. Identify high priority interface areas with a high risk of fire due to fuels buildup. Develop fuel management plans for these high risk areas.

Wildland Fire Suppression and Rehabilitation:

Train and use resource advisors and dispatchers to assist with prioritizing wildland fires during multiple ignition episodes and to work with Incident Commanders. Suppress fires that occur in conditions outside of prescriptive parameters at minimum cost and size considering firefighter and public safety, benefits, and values to be protected, consistent with resource and fire management objectives. Rehabilitation will be based on careful consideration of resource objectives, area concerns, and constraints. All roads, trails and firebreaks constructed during wildland fire suppression activities will be restored to natural contours.

Seasonal fire closures: Identify areas where seasonal closures for open fires may be appropriate to reduce the risk of wildland fire on or adjacent to high value interface, commercial developments, recreation, wildlife, cultural, wilderness, and visual resource management areas and facilities. Emergency fire restrictions and closures may be implemented by the Field Office Manager during periods of high fire danger. Restrictions and closures will be closely coordinated with affected counties and cooperating agencies. The extent of fire restrictions will be determined by the Field Office Manager or an authorized officer in conjunction with counties and cooperating agencies. Emergency fire closures will be designed to reduce the risk of human-caused wildland fire on public lands. Special management areas may receive earlier or additional restrictions where necessary.

Prescribed Burning and Other Fuels Management:

Priority for prescribed burning and other fuels management activities will be given to lands identified as retention areas instead of lands identified as available for disposal. An interdisciplinary team (IDT) will analyze burn plans to identify appropriate guidance and mitigation.

Hazardous fuels reduction plans: Develop hazardous fuels reduction plans to reduce the risk of wildfire near urban population areas, rural subdivisions, communications sites, powerline and pipeline rights-of-way, and other facilities, commercial uses, and developments on or adjacent to public lands with hazardous fuels buildup. Identify areas where prescribed fire and other fuel management techniques may be used to reduce the fuels and risk of wildland fire on high value resource or commercial areas. Fuel reduction efforts will be coordinated with private landowners, affected interests, and other agencies.

Fish and Fish Habitat Objective: Protect high value fish habitat from fire management related activities that could harm fish or damage fish habitat.

Wildland Fire Suppression and Rehabilitation:

Streamside Management Zone (SMZ): The SMZ encompasses a strip at least 50 feet wide on each side of a

stream, lake, or other body of water, measured from the ordinary high water mark, and extends beyond the high water mark to include wetlands and areas that provide additional protection in zones with steep slopes or erosive soils. Management practices within the SMZ that might affect water quality, fish, or other aquatic resources may have to be modified. Limit the use of heavy equipment and apply "Light-on-the-Land" fire suppression techniques within the SMZ. Maintain vegetation within the SMZ to filter out sediment in runoff and decrease sedimentation and turbidity in fish habitat.

Threatened or Endangered (T&E) and Special Status species: "Light-on-the-land" fire suppression tactics will be used in designated areas that drain into threatened, endangered, or Special Status species fish habitat. The use of heavy equipment (bulldozers) during wildland fire suppression and rehabilitation in drainages with these fish species should be avoided to protect the fish species. Restrict the use of fire retardant from aerial application over or adjacent to identified sensitive, T&E species, and Special Status species fish habitat. Priority for placement of fire camps and fire staging areas should be outside these drainages. To minimize sedimentation and turbidity, use of motorized vehicles during mop-up should be minimized.

A fire plan for each drainage with T&E or Special Status fish species should specify fire management objectives and wildland fire suppression guidance taking into account the special concerns related to these fish species.

Wildland fire suppression in riparian areas, or areas that drain into sport fish species habitat or Special Status species fishery habitat (Yellowstone Cutthroat Trout) would limit the use of heavy equipment and restrict the use of fire retardant over or adjacent to identified Special Status species habitat.

Prescribed Burning and Other Fuels Management:

Streamside Management Zone (SMZ): SMZ guidance listed under wildland fire suppression above would also apply to prescribed fire practices.

Fuels management: Prescribed fire will remain a suitable distance away from fisheries, streams, lakes or ponds to minimize sediment that reaches the body of water. Distance will depend on vegetation cover and slope of the watershed. The use of heavy equipment should be avoided within designated watersheds to protect T&E and Sensitive Species fish habitat. Placement of staging areas and fire camps should be outside these watersheds. A prescribed burn plan should specify fire management objectives and consider existing watershed characteristics. Use of motorized equipment should be evaluated on a project basis to be "light-on-the-land" where appropriate.

Off Highway Vehicle (OHV) Use Objective: Vehicle use associated with non-emergency fire management on public lands should comply with existing travel restrictions to minimize damage to other resources, values, and authorized uses.

Wildland Fire Suppression and Rehabilitation:

Equipment use restriction: The use of heavy equipment and off-road vehicles for wildland fire suppression should be avoided in areas closed to OHV use except in emergency, administrative, or permitted situations. Where appropriate, resources and values should be protected by restricting fire suppression to "light-on-the-land" suppression tactics. In areas designated as limited OHV use, limit the use of earth moving/tillage equipment for wildland fire suppression to existing roads and trails unless waived by the Field Office Manager or an authorized officer. A Resource Advisor will be on site during fire suppression and rehabilitation efforts to provide guidance and insure compliance with these guidelines.

Prescribed Burning and Other Fuels Management:

Equipment use restriction: The use of heavy equipment and off road vehicles for prescribed fires should be avoided to protect resource values on areas designated as closed to OHV use. Placement of staging areas and fire camps should be approved by the Field Office Manager or Resource Advisor. "Light-on-the-land" techniques should be used on nearly all areas closed to OHVs. Where appropriate, the use of heavy equipment and OHVs shall require authorization on areas closed to OHV use and shall be limited to existing or designated roads and trails within areas designated for limited OHV use without authorization. The use of earth moving/tillage equipment for prescribed fires will be limited to existing roads and trails unless waived by the Field Office Manager or an authorized officer. Other uses of earth moving/tillage equipment will require authorization. A Resource Advisor will be on site during fire suppression and rehabilitation efforts. All prescribed fire activities will be done in a manner to avoid unnecessary impairment of the area's resources and values.

Recreation Objective: Protect developed recreation facilities and special recreation management areas.

Wildland Fire Suppression and Rehabilitation:

Seasonal fire closures: Identify areas where seasonal restrictions or closures may be appropriate to reduce the risk of wildland fire on or adjacent to high value recreation areas and facilities.

Prescribed Burning and Other Fuels Management:

Hazardous fuels reduction plans: Develop hazardous fuels reduction plans to reduce the risk of wildfire near designated recreation facilities on public lands. Identify areas where prescribed fire and other fuels management techniques could be used to reduce dangerous fuels buildup near important recreation facilities.

Rights-of-Way Objective: Protect powerlines, pipelines, communications sites, roadways and other permitted facilities on rights-of-way that could be damaged by fire management activities.

Wildland Fire Suppression and Rehabilitation:

Fire closures: Identify areas where seasonal restrictions or closures for open fires may be appropriate to reduce the risk of wildland fire on or adjacent to high value interface, commercial developments, recreation, wildlife, cultural, wilderness, visual resource management areas and facilities.

Prescribed Burning and Other Fuels Management:

Hazardous fuels reduction plans: Develop hazardous fuels reduction plans to reduce the risk of wildland fire near urban population areas, rural subdivisions, communications sites, powerline and pipeline rights-of-way, and other facilities, commercial uses, and developments on or adjacent to public lands with hazardous fuels buildup. Identify areas where prescribed fire and other fuel management techniques may be used to reduce the fuels and risk of wildland fire on or adjacent to high value resource or commercial areas.

Soil and Water Objective: Maintain and protect watershed values and prevent accelerated erosion caused by fire management activities.

Wildland Fire Suppression and Rehabilitation:

Fireline construction: Avoid fireline construction in SMZs, wetland areas and on highly erodible sites (fine-textured soils, especially on steep slopes, and unchanneled drainageways such as swales, draws, and ravines).

Equipment restrictions: Avoid the use of heavy equipment and OHVs on steep and fragile soils and in SMZs during and following fire suppression. Limit the use of heavy equipment to blade fire lines in watersheds where State of Montana sedimentation standards are exceeded. Avoid the use of retardant over or adjacent to rivers, streams, and open water.

Light-on-the-land: "Light-on-the-land" fire suppression tactics should be used in SMZs and on steep and fragile soils and in designated watersheds with stream segments where sedimentation exceeds state standards. The use of heavy equipment (bulldozers) during wildland fire suppression and rehabilitation on these areas should be avoided. Fire camps should be located outside SMZs, fragile soils, and sensitive watersheds. Use of motorized vehicles and mechanical equipment during mop-up should be minimized within designated watersheds.

Fueling sites: Spill kits and barriers should be used at all fueling sites.

Watering sites: Do not dam culvert inlets for water supplies- outlets often have pools or can be dammed with less potential for impact. Do not excavate streams for watering pools. Use porta-tanks, pumps, and hose to bring water to an engine access spot rather than constructing access to streamsides.

Camps, staging sites, helibases, etc.: Use existing disturbed sites where soils are already exposed when feasible.

Soil stabilization: Fire rehabilitation plans should address the feasibility of soil stabilization and seeding to protect watersheds. Fires in watersheds where sedimentation in stream segments exceed state standards would receive priority for rehabilitation. Don't seed lightly burned areas. Seed perennial native species in moderate to severely burned areas. A short-lived annual cover species may be used in all burn severity areas to prevent short-term soil loss

Fireline rehabilitation: Construct waterbars on all firelines except for those with rocky, well-drained soils. Shape exposed soils on dozer lines to original contour and seed with appropriate seed mix.

Runoff and erosion control and rehabilitation: Use rehabilitation practices listed in the Interagency Burned Area Stabilization and Rehabilitation Handbook.

Prescribed Burning and Other Fuels Management:

Areas will be burned to leave a mosaic pattern of unburned vegetation. Land uses will be monitored and adjusted as necessary after prescribed fire to sustain stable soils and vegetation. Vegetation will be re-seeded where needed.

Fragile soils: Avoid the use of heavy equipment and vehicles on fragile soils and in SMZs during prescribed fires and other fuels management activities. Removal of vegetative cover on fragile soils should be carefully examined in environmental analyses.

Fuels management: Place staging areas and fire camps outside of SMZs and designated watersheds with fragile soils. Use of motorized equipment would be limited to "light-on-the-land" techniques in designated drainages and watersheds.

Social and Economic Objectives: Reduce the risk of wildland fire on high priority interface areas.

Prescribed Burning and Other Fuels Management:

Develop and implement fuel management plans for interface areas at highest risk.

Special Areas Objectives: Protect Areas of Critical Environmental Concern (ACECs), Wild and Scenic River (W&SR) corridors, Outstanding Natural Areas (ONAs), Special Recreation Management Areas (SRMAs), and historic sites from surface disturbing fire management related activities.

Wildland Fire Suppression and Rehabilitation:

Equipment restrictions: Restrict the use of heavy equipment for wildland fire suppression in designated special areas.

Prescribed Burning and Other Fuels Management:

Fuel reduction plans: Develop hazardous fuels reduction plans to reduce the risk of wildfire on or adjacent to areas with special designations where public lands have hazardous fuels buildup. Identify areas where prescribed fire and other fuel management techniques may be used to reduce the fuels and risk of wildland fire on high value resource or uses.

Threatened, Endangered, and Sensitive (TES) Species and TES Habitat Objectives: Protect, maintain, and/or improve habitats necessary for the conservation of TES species and the ecosystems upon which they depend. Protect areas of occupied habitat and areas of suitable habitat, important for species expansion, from adverse effects resulting from fire/fuels management related activities. Maintain or improve quantity and quality of suitable habitat for TES species through the use of fire and fuels management and rehabilitation activities. The following guidance is recommended to minimize effects from fire suppression, rehabilitation, prescribed burning, other fuel reduction efforts and related activities. Refer to Tables 5,9, and 10 for a list of the guidance that applies to each species.

General–Use "light-on-the-land" fire suppression tactics wherever possible.

Specific guidance for minimizing effects:

BALD EAGLE:

BE1– Protect known nesting and roosting habitat. No human disturbance within mile of bald eagle nests for the period of February 1 through August 15. No human disturbance within 1/4 mile of a winter roost (no winter roosts are currently identified on BLM managed lands).

BE2– Minimize disturbance to known winter roost sites: No human disturbance within mile of a winter roost or if within mile, activity is restricted to period of 9 am to 3 pm during the period of November 1 through March 1 (no winter roosts are currently identified on BLM managed lands.

BE3– Minimize risk to nesting and roosting sites: No blasting within one mile of bald eagle nest sites for the period of January 1 through August 15 and no blasting within one mile of bald eagle winter roost during the period of November 1 through March 1 (no winter roosts are currently identified on BLM managed lands).

BE4– No helicopter/aircraft activity or aerial retardant application within mile of bald eagle nest sites for the period of January 1 through August 15 and winter roost sites for the period of January 1 through August 15.

BE5- Prescribed burn activities shall be conducted in a manner so as to insure nest and winter roost sites are more than mile from downwind smoke effects.

INTERIOR LEAST TERN

Minimize disturbance, displacement, and risk to known nesting sites:

LT1 - No human disturbance within 1/4 mile of least tern nest sites for the period of May 15 - August 15.

LT2 - No blasting within mile of least tern nest sites for the period of May 15 - August 15.

LT3 - No helicopter/aircraft activity or aerial retardant application within mile of least tern nest sites for the period of May 15 - August 15.

LT4 - Prescribed burn activities shall be conducted in a manor so as to insure least tern nest sites are greater than mile from downwind smoke effects for the period of May 15 - August 15.

MOUNTAIN PLOVER

Minimize disturbance, displacement, and risk to known nesting sites:

- MP1 No human disturbance within 1/4 mile of mountain plover nest sites for the period of April 1 July 31.
- MP2 No blasting within mile of mountain plover nest sites for the period of April 1 July 31.
- MP3 No helicopter/aircraft activity or aerial retardant application within of mountain plover nest sites for the period of April 1 July 31.
- MP4 Prescribed burn activities shall be conducted in a manor so as to insure mountain plover nest sites are greater than mile from downwind smoke effects for the period of April 1 - July 31.

PIPING PLOVER

Minimize disturbance, displacement, and risk to known nesting sites:

- PP1 No human disturbance within 1/4 mile of piping plover nest sites for the period of April 15 July 31.
- PP2 No blasting within mile of piping plover nest sites for the period of April 15 July 31.
- PP3 No helicopter/aircraft activity or aerial retardant application within of piping plover nest sites for the period of April 15 July 31.
- PP4 Prescribed burn activities shall be conducted in a manor so as to insure piping plover nest sites are greater than mile from downwind smoke effects for the period of April 15 - July 31.

WHOOPING CRANE

Minimize disturbance, displacement, and risk to potential or occupied nesting sites:

- WC1 No human disturbance for the period of April 1 August 31 within mile of occupied whooping crane habitat (nesting, roosting, and foraging) or potential nesting habitat where whooping crane(s) have been observed within the past three years.
- WC2 No blasting for the period of April 1 August 31 within one mile of occupied whooping crane habitat (nesting, roosting, and foraging) or potential nesting habitat where whooping crane(s) have been observed within the past three years.
- WC3 No helicopter/aircraft activity or aerial retardant application for the period of April 1 August 31 within mile of occupied whooping crane habitat (nesting, roosting, and foraging) or potential nesting habitat where whooping crane(s) have been observed within the past three years.

WC4 - Prescribed burn activities shall be conducted in a manor so as to insure whooping crane nest sites or occupied habitat are greater than mile from downwind smoke effects for the period of April 1 - August 31.

BLACK-FOOTED FERRET

Minimize potential for disturbance, displacement/mortality risk

- BF1 No heavy equipment operation off of existing roads within 1/4 mile of prairie dog town(s) having documented occurrence of black-footed ferret.
- BF2 No aerial retardant application within 1/4 mile of prairie dog town(s) having documented occurrence of black-footed ferret.
- BF3 No surface disturbance of prairie dog towns having documented occurrence of black-footed ferret.

CANADA LYNX

Minimize potential for disturbance, displacement/mortality risk

- CL1 Activities shall not cause a greater than 30% temporary loss or 15% permanent loss of suitable habitat in a decade. In addition, 10% of the Lynx Assessment Unit (LAU) shall remain in denning habitat in patches larger than 5 acres.
- CL2 Processes used to reduce fuel levels, prepare sites for planting or for reintroduction of fire shall preserve the majority of large standing dead trees and large woody debris (denning habitat).
- CL3 Precommercial thinning or introduction of fire into lynx habitat shall only occur when the forest stand no longer provides snowshoe hare habitat. This occurs when self-pruning processes have eliminated snowshoe hare cover and forage availability.
- CL4 Following disturbance such as blowdown, fire, insects, and disease that could contribute to lynx habitat, do not salvage harvest when the affected area is smaller than 5 acres (exceptions would include areas such as developed campgrounds). Where larger areas are affected, retain a minimum of 10% of the affected area per LAU in patches of at least 5 acres.
- CL5 Design burn prescriptions to regenerate or create snowshoe hare habitat (e.g., regeneration of aspen and lodgepole pine).
- CL6 Minimize construction of temporary roads, firebreaks, machine lines, etc. on ridges, saddles, or areas that would create permanent travel ways that

could facilitate increased access by competitors (e.g.,coyote, bobcat).

CL7 - Restrict livestock grazing of fire created openings, aspen stands, willow carrs, and other potential lynx habitat until successful regeneration of shrub and tree components occurs.

GRAY WOLF

Minimize potential for disturbance, displacement/mortality risk

GW1 - No human disturbance or associated activities shall be within one mile of a den site from April 15 to June 30.

GW2 - No human disturbance or associated activities shall be within one mile of a rendezvous site from April 15 to June 30.

GRIZZLY BEAR

Minimize potential for displacement/mortality risk GB1 - Within the Recovery Zone (defined in Grizzly Bear Recovery Plan (USFWS 1993)) any off-road vehicular travel or vehicular travel on restricted roads, shall adhere to access standards/direction as provided in local or regional interagency agreements, Biological Opinions, or local Land Use Plans.

- GB2 All activities requiring overnight stays or establishment of a base camp shall be limited to less than 20 individuals **and** less than 5 days duration within the Recovery Zone (defined in Grizzly Bear Recovery Plan (USFWS 1993)).
- GB3 Firewood collection within the Recovery Zone (defined in Grizzly Bear Recovery Plan (USFWS 1993)) shall be limited to roadside hazard tree removal, road maintenance, or campground maintenance activities.
- GB4 Activities within the Recovery Zone (defined in Grizzly Bear Recovery Plan (USFWS 1993)) in Riparian, Meadows, and Stream Corridors including restoration & improvement projects must not occur between April 1 and July 1 or must be completed in 1 day.
- GB5 Within the Recovery Zone (defined in Grizzly Bear Recovery Plan (USFWS 1993)) projects that would significantly change the vegetative community shall not be implemented in huckleberry producing sites.

Minimize potential for habituation/human conflict GB6 - Within the Recovery Zone (defined in Grizzly Bear Recovery Plan (USFWS 1993)) activities will adhere to Interagency Grizzly Bear Guidelines or local interagency grizzly bear standards for sanitation measures and storage of potential attractants.

GB7 - Within the Recovery Zone (defined in Grizzly Bear Recovery Plan (USFWS 1993)) activities will not involve planting or seeding of highly palatable forage species near roads or facilities used by humans.

BULL TROUT

BT1 - Projects shall be designed using the guidance set forth in the "Interim Bull Trout Habitat Conservation Strategy".

PALLID STURGEON

PS1 - No aerial retardant application within 300 feet of Missouri or Yellowstone River.

PS2 - Restrict livestock grazing of riparian vegetation, especially cottonwood stands, recently affected by fire or other catastrophic events (blowdown, ice shear, flood, etc.) until successful regeneration of vegetative components occurs.

UTE LADIES' TRESSES

- UL1 All proposed action areas within potential habitat shall be surveyed by a botanically qualified biologist, botanist or ecologist to determine the presence/absence of the species.
- UL2 If surveys are not completed to determine the presence or absence of the species **no action**, that would potentially affect the species should it be present, will be implemented within suitable habitat.
- UL3 Areas of occupied habitat within a proposed project area will have a "site specific" **no activity** buffer established by a qualified botanist, biologist or ecologist, to protect occupied habitat.
- UL4 Apply Best Management Practices for protection of the project area from invasive plant species.
- UL5 Non-native species shall not be used in revegetation of suitable habitat.

WATER HOWELLIA

WH1 - All proposed action areas within potential habitat shall be surveyed by a botanically qualified biologist, botanist or ecologist to determine the presence/absence of the species.

WH2 - If surveys are not completed to determine the presence or absence of the species **no action**, that

would potentially affect the species should it be present, will be implemented within suitable habitat.

WH3 - Areas of occupied habitat within a proposed project area will have a "site specific" **no activity** buffer established by a qualified botanist, biologist or ecologist, to protect occupied habitat.

WH4 - Apply Best Management Practices for protection of the project area from invasive plant species.

WH5 - Non-native species shall not be used in revegetation of suitable habitat.

WESTERN PRAIRIE FRINGED ORCHID

WP1 - All proposed action areas within potential habitat shall be surveyed by a botanically qualified biologist, botanist or ecologist to determine the presence/absence of the species.

WP2 - If surveys are not completed to determine the presence or absence of the species **no action**, that would potentially affect the species should it be present, will be implemented within suitable habitat.

WP3 - Areas of occupied habitat within a proposed project area will have a "site specific" **no activity** buffer established by a qualified botanist, biologist or ecologist, to protect occupied habitat.

WP4 - Apply Best Management Practices for protection of the project area from invasive plant species.

WP5- Non-native species shall not be used in revegetation of suitable habitat.

Wildland Fire Suppression:

General - Use "Light-on-the-Land" fire suppression tactics in areas that include TES Species habitat.

Specific guidance for minimizing effects:

WF1 - Protect known locations of occupied habitat.

WF2 - Avoid use of heavy equipment (bulldozers, engines) within 100 meters of occupied habitat except as necessary to protect reproductive sites (nests, dens, etc.).

WF3 - Restrict the use of aerial retardant application within 100 meters of occupied habitat except as necessary to protect reproductive sites (nests, dens, etc.)

WF4 - Restrict the placement of fire camps, fire

staging areas, and helibase from within 1/4 mile of occupied habitat.

WF5 - Use of motorized vehicles during mop-up activity in suitable or occupied habitat should be avoided.

WF6 - Restrict helicopter bucket fills, engine/pumper fills, or other water access/uses from within 100 meter of unvegetated sand-pebble beaches or islands in freshwater and saline wetlands and shorelines and exposed beds of larger reservoirs and rivers.

WF7 - Restrict the use of heavy equipment, fire retardant, or placement of fire camps, staging areas, and helibases from within any occupied drainage.

Rehabilitation: General - Rehabilitation plans shall be designed and associated NEPA documentation (environmental assessment) shall disclose how the proposed action will maintain or improve the quantity and quality of suitable habitat for TES species.

Specific guidance for minimizing effects:

RH1 - Timing of rehabilitation efforts shall avoid disturbance during the reproductive (nesting, denning) season of TES species (varies by species).

RH2 - Avoid and protect all known nesting, roosting, denning, and spawning sites/structures and maintain adequate patch size of habitat around site/structure.

RH3 - No rehabilitation activities shall be incurred within 100 meters of sensitive plant populations unless specifically designed to maintain or improve the existing population.

RH4 - Use of non-native vegetative species shall be minimized.

RH5 - Off road use of motorized vehicles in suitable or occupied habitat should be avoided.

Fuels Treatments (Prescribed Burning and Other Fuels Management):

General - Prescribed Burn/Fuels Reduction plans shall be designed and associated NEPA documentation (environmental assessment) shall disclose how the proposed action will maintain or improve the quantity and quality of suitable habitat for TES species.

Specific guidance for minimizing effects:

FT1 - Timing of prescribed burning or other fuels treatment activities shall avoid disturbance during the reproductive season of TES species (varies by species).

FT2 - Avoid and protect all known nesting, roosting, denning, and spawning sites/structures and maintain adequate patch size of habitat around site/structure.

FT3 - No prescribed burning or other fuels treatment activities shall be incurred within 100 meters of sensitive plant populations unless specifically designed to maintain or improve the existing population. FT4 - Baseline information shall be collected pre-treatment on existing condition and post treatment monitoring shall be conducted to determine the effectiveness of project.

FT5 - Avoid off road use of motorized vehicles during prescribed burn or other fuels treatment activities in suitable or occupied habitat.

FT6 - Insure fire prescription or fuels treatments will not consume (dominate) large trees within 1 mile of known nests and roost sites.

FT7 - Avoid and protect important use areas for individual species; i.e. travel corridors (grizzly, lynx, wolf), resting sites (forested riparian for grizzly), foraging areas (snowshoe hare habitat for lynx), rendezvous sites (wolves).

Vegetation Objective: Manage forest, shrublands, rangelands, riparian areas, and wetlands for proper functioning condition. Maintain or promote adequate amounts of vegetative ground cover; maintain, improve or restore riparian-wetland functions; promote the opportunity for seedling establishment; emphasize native species in the support of ecological function; and only use nonnative species when native species are not available or are incapable of achieving proper functioning condition. Actively manage forest communities towards their historic range of variation (HRV). The land will be managed to meet Standards of Health as established in August 1997. Actions through all aspects of fire suppression, rehabilitation and subsequent use authorizations should be regulated to encourage recovery of native grasses, forbs and shrubs consistent with Standards of Health and land use plan objectives.

Wildland Fire Suppression and Rehabilitation:

Grass lands, Shrub lands, and Forest lands: Use appropriate management response that is based on consideration of management options and resource values at risk during wildland fire suppression. Weed-free seed should be used and preference should be given to seeding appropriate native plant species when rehabilitation is appropriate. Straw and hay bales used for erosion control should also be weed-free.

Forest lands: Reforestation with appropriate planting stock should occur within the time frame and location identified by the rehabilitation team. Salvage harvest of burned conifer forest resources will be considered on all non-Wilderness or non-WSA lands. Grazing use: Adjust the amount and timing of livestock grazing following fire occurrence to achieve the standard listed above. Grazing use should be regulated after a fire to encourage the production of understory grasses and forbs.

Rehabilitation: Rehabilitation plans will be developed following fire to determine appropriate site stabilization, re-vegetation, and monitoring.

Riparian Areas and SMZs: Avoid the use of retardant for wildland fire suppression. Wildland fire suppression in riparian areas, or areas that drain into sport fish species, Special Status species (Yellowstone Cutthroat Trout, or TES species habitat would limit the use of heavy equipment and restrict the use of fire retardant over or adjacent to identified habitat of these species.

Weed control: Heavy equipment used in fire suppression should be cleaned before using at a different location to avoid the transfer of noxious weeds. Location of camps and staging areas should avoid high density weed infestation areas.

Burned areas prone to cheatgrass or other noxious weed invasions should be seeded with an appropriate seed mixture to reduce the probability of noxious weeds or other undesirable plants becoming established on the site.

Certified noxious weed seed free seed must be used and preference should be given to seeding appropriate native plant species when rehabilitation is appropriate. Straw and hay bales used for erosion control must also be weed-free.

Prescribed Burning and Other Fuels Management:

Grasslands: Prescribed fire may be used to create fire breaks, reduce fuel loading, increase diversity of vegetation, increase forage production, provide a mosaic of vegetation and land cover, and may be used to manage undesirable plants and weeds.

Shrub lands: If a shrub species is fire adapted, prescribed fire may be used to reduce fuel loading, increase diversity of vegetation and forage production, create mosaics of burned and unburned vegetation to produce diverse age classes and increase forage production.

Forest lands: Prescribed fire may be used to create fire breaks, reduce fuel loading, increase diversity of vegetation, increase forage production, provide a mosaic of vegetation and land cover, dispose of slash following timber harvest, and to manage undesirable species.

Riparian Areas: Prescribed fire and selective cutting may be used in limited situations to restore riparian areas as long as the function of the SMZ is not compromised. Grazing use: Adjust the amount and timing of livestock grazing prior to and following the use of prescribed fire to achieve proper functioning condition and meet rangeland health standards. Grazing use should be regulated to encourage the production of understory grasses and forbs. Prescribed fire and other fuels management techniques could be used to achieve grazing management objectives.

Forest management: Where appropriate, use all available treatments, including mechanical methods and prescribed fire, to restore forest communities to their historic range of variation (HRV). Where forest stand composition, structures, species mix, and fuel loadings are out of balance; it may not be possible to allow prescribed fire in these communities without unacceptable impacts. Other treatments may be necessary prior to considering the use of prescribed fire.

Fuels management: Hazardous fuels reduction plans should identify areas where prescribed fire and other fuels management techniques could be used to reduce dangerous fuels buildup and achieve other timber management objectives and influence vegetative succession.

Slash burning: Coordinate slash burning with MT Department of Health and Environmental Sciences, Air Quality Division for burn permits.

Weed control: Prescribed burn plans and vegetation treatments must address the presence and expected impact on noxious weeds. Prescribed burning and vegetation treatments should be coordinated with BLM weed experts and/or appropriate county weed supervisors to minimize the spread of weeds.

Vehicles and heavy equipment used for prescribed fires should be washed prior to arriving at a new location to avoid the transfer of noxious weeds.

Visual Resource Management (VRM) Objective: VRM Class I areas (including all Wilderness and WSAs unless specifically exempted in a Resource Management Plan): To maintain a landscape setting that appears unaltered by man. VRM Class II areas: To conduct activities and to design alterations that retain the existing character of the landscape. VRM III areas: To conduct activities and to design alterations so as to partially retain the existing character of the landscape. Class IV: To manage activities so they repeat the form, line, color, and texture of the characteristic landscape.

Wildland Fire Suppression and Rehabilitation:

Equipment restrictions: Avoid the use of heavy equipment and retardant for wildland fire suppression in designated

VRM class I areas unless the impact of the fire would more severely impact VRM Class I than the impact of the equipment and retardant. Use of heavy equipment and retardant in VRM Class I areas must be coordinated by Field Office VRM specialist. Fire rehabilitation of VRM Class I and Class II areas should be coordinated with the Field Office VRM specialist.

Prescribed Burning and Other Fuels Management:

Fuel reduction plans: Hazardous fuels reduction plans on or near VRM class I and class II areas should be coordinated with a VRM specialist to reduce the risk of unacceptable visual impacts.

Wilderness Objective: Protect wilderness characteristics of land within the National Wilderness Preservation System and in Wilderness Study Areas (WSA). Fire management related activities should preserve the natural character of wilderness areas and avoid unnecessary impairment of the area's suitability for preservation as wilderness. Fire management within Wilderness and WSAs should comply with Interim Management Policy for Lands Under Wilderness Review (H-8550-1, J Fire Management).

Wildland Fire Suppression and Rehabilitation:

Fire managers should inform suppression personnel during dispatch that the fire is in a WSA and that special constraints apply. Memorandums of Agreement (MOAs) with other agencies should contain stipulations reflecting wilderness interim management guidance. Use of earth moving equipment will be prohibited for wildland fire suppression unless waived by the Field Manager. Fire managers should notify Field Managers of any unsuccessful initial attack action on a fire in a WSA before developing the Escaped Fire Situation Analysis.

Resource Advisors will use fire plans in making decisions during emergency fire situations and prescribed ignitions. All uses of earth moving equipment within a WSA require authorization.

Light-on-the-land: "Light-on-the-land" fire suppression tactics should be used. The use of heavy equipment during wildland fire suppression and rehabilitation in WSAs should be avoided to protect wilderness characteristics. With authorization, suppression methods may include use of power tools, aircraft, motorboats, and motorized fire-fighting equipment while applying "light-on-the-land" techniques. Placement of fire camps should be outside WSAs. Existing fire lookout towers and helispots may be used and maintained. New fire lookout towers and helispots may be approved as part of the fire management

activity plan if they are the minimum necessary for fire suppression in the WSA. Use of motorized vehicles and mechanical equipment during mop-up should be minimized.

A fire plan for each WSA should specify fire management objectives, existing wilderness characteristics of the area, the need to prevent impairing actions, the natural role of fire, historic fire occurrence, expected fire behavior, acceptable suppression techniques, buffer zones, smoke management concerns, access requirements of other agencies, anticipated effects on private or other agency inholdings, and on adjacent landowners. In planning firebreaks, the use of natural firebreaks and existing roads is encouraged. A Resource Advisor will be on site during wildland fire suppression and rehabilitation efforts to insure compliance with the decisions and guidelines for each WSA.

To hold fire to the desired level in WSAs fire management procedures and plans will rely on 1) the most effective methods of suppression that are least damaging to wilderness values, other resources and the environment, while requiring the least expenditure of funds including rehabilitation of the area, 2) an aggressive fire prevention program, and 3) an integrated cooperative suppression program by DOI agencies and other qualified suppression organizations.

Emergency fire rehabilitation measures will continue to be carried out under guidelines in Handbook H-1742-1 and Manual Section 1742. Efforts should be made to rehabilitate any impacts created by suppression activity prior to releasing fire crews and associated equipment following fire containment.

Prescribed Burning and Other Fuels Management:

Fuels management: All uses of earth moving equipment within a WA or WSA require authorization. The use of heavy equipment should be avoided to protect wilderness characteristics. Staging areas and fire camps should be located outside WSAs. Use of power tools and motorized equipment would be limited to "light-on-the-land" techniques. Use of motorized vehicles and mechanical equipment during mop-up should be minimized.

A prescribed burn plan should specify fire management objectives, historic fire occurrence, the natural role of fire, expected fire behavior, smoke management, effect on private or other agency inholdings, and on adjacent landowners.

Wildlife and Wildlife Habitat Objective: Provide habitat as necessary to maintain a viable and diverse population of native plant and animal species, including special status species. Provide, maintain, and restore habitat for healthy, productive, and diverse native plant and animal populations and communities.

Wildland Fire Suppression and Rehabilitation:

Minimize the amount of sage grouse habitat burned by giving wildland fire suppression priority to designated known sage grouse habitat within the framework of the Federal Wildland fire Policy (i.e. human life and safety as the first priority).

Appropriate resource staff, including fire specialists and wildlife biologists, will review fire management plans annually to incorporate new sage grouse habitat and other wildlife habitat information in setting wildfire suppression priorities. Distribute updates to fire dispatchers for initial attack planning.

As part of any preparedness planning process, identify the location of known sage grouse habitat and other wildlife habitats of concern so that temporary facilities (such as fire camps, staging areas, and helibases) will avoid disturbance or degradation of designated habitats of concern.

Train and use resource advisors and dispatchers to assist with prioritizing rangeland fires during multiple ignition episodes and to work with Incident Commanders as appropriate.

Ensure that sage grouse and other priority wildlife habitat data are incorporated into each wildland fire situation analysis to assist in determining appropriate suppression plans and prioritizing fires during multiple ignition episodes.

Use direct attack tactics when it is safe and effective at minimizing the amount of sage grouse habitat imperiled by wildland fire.

Retain unburned areas (including interior islands and patches between roads and fire perimeter) of sage grouse habitat unless there is a compelling safety, resource protection, or control objective at risk.

Protect leks, surrounding sagebrush cover, and identified winter range within 400 meters (approximately 1/4 mile) of those leks. Ground disturbing fire suppression actions, such as the use of heavy equipment and excessive brush removal, should be judiciously applied to protect sage grouse habitat.

Evaluate all wildland fires to determine if reclamation is necessary to recover ecological processes and achieve habitat objectives appropriate for biological needs of sage grouse and other wildlife habitats of concern. Assure that long-term fire rehabilitation objectives are consistent with the desired natural vegetation community.

Align long-term rehabilitation objectives with habitat needs of sage grouse. Seedings should include an appropriate mix of grasses, forbes, and shrubs, including sagebrush, that will recover the ecological processes and habitat features of the potential natural vegetation. Emphasize native plant species and shrub species when these species are adapted to the site, are available in sufficient quantities, and are economically and biologically feasible.

Reseed burned sage grouse habitat within one year unless natural recovery of the native plant community is expected. Areas disturbed by heavy equipment should be given priority consideration.

Prescribed Burning and Other Fuels Management:

Old Growth juniper stands: To protect unique and valuable wildlife habitats and to add variety to juniper stands, prescribed burning of old growth communities of juniper should be avoided. These stands provide islands and edge communities to the prescribed burning areas.

Use prescribed fire or mechanical treatments in degraded aspen stands to improve vigor, stimulate regeneration, and increase vegetative diversity.

Sagebrush: Design vegetation management strategies that are consistent with historical succession and disturbance regimes. In sagebrush communities, the broad scale strategy should be based on comparison of historical and current ecological processes and landscape patterns, and address the seasonal needs of sage grouse and other sage dependent species.

Prescribed fire will not be used in sagebrush habitat unless the treatments are designed to restore ecological processes and achieve specific wildlife habitat enhancements. In known or potential sage grouse habitat, use vegetation treatments and seedings designed to achieve specific objectives for sage grouse or other wildlife species of concern. If fire is the tool used to achieve these objectives, do not burn within two miles of a sage grouse or sharptail lek from March 1 through June 15 each year, within 1/2 mile of a raptor nest from March 1 through August 1 each year, on least tern nesting habitat along the Yellowstone River, within 1,000 feet of blue heron and double-crested cormorant rookeries, or on crucial winter range during periods of use. To maintain viable sagebrush communities for winter range for deer, antelope, and sage grouse, the use of prescribed fire in identified sage grouse habitat will be coordinated with private landowners, and other agencies including US Fish and Wildlife, and MT Fish, Wildlife and Parks.

Use mechanical treatment and prescribed fire to remove juniper and other conifers that have invaded sage grouse habitat and other sagebrush sites before the increasing juniper density reduces species diversity and habitat effectiveness within sagebrush types.

Avoid vegetation treatments in sage grouse habitat areas that are highly susceptible to cheatgrass or other invasive weed species. Any vegetation treatments conducted in annual grassland-dominated communities will be accompanied by restoration, and if necessary, reseeding to achieve re-establishment of native vegetation.

Maintain shrubs along riparian zones, meadows, lakebeds, and farmlands to provide hiding cover for sage grouse broods. Avoid removing this vegetation unless such removal is necessary to achieve habitat management objectives.